APLA Syndrome Presenting as Recurrent Stroke

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ABSTRACT

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Antiphospholipid antibody syndrome (APLA) is one of the most frequent acquired thrombophilias.Thrombosis can be at both venous and arterial level, are usually recurrent and frequently affect cerebral circulation. We present here a story of a 46 year old female with history of two CVAs in form of a TIA and a Left upper limb monoparesis. Presence of thrombocytopenia made us evaluate in terms of APLA and finally she was diagnosed as Systemic lupus erythematosis and secondary APLA syndrome.

Keywords: Recurrent stroke, APLA syndrome, SLE

*See End Note for complete author details

CASE REPORT

A 49 year old female was admitted to the hospital with history of Left Upper limb monoparesis of 2 days duration .There was no history of loss of consciousness, seizures or any cranial nerve symptoms. Medical history was significant for systemic hypertension and a history of a transient ischemic attack 1 year ago. Six months back she had an attack of Dengue fever with documented thrombocytopenia. She did not smoke cigarettes or use Oral contraceptive pills.

On Examination she had stable vitals. The significant findings were Left upper limb monoparesis with exaggerated upper limb and lower limb deep tendon reflexes and extensor plantar. She was also found to have left hemisensory dulling .Other systems were within normal limits.

Investigations showed a raised ESR of 70 mm/1st hour and mild thrombocytopenia (1 lakhs). CT Brain revealed subacute infarct in the Right frontal cortex and centrum semiovale. The history of recurrent stroke in this 46 year old female who had no apparent precipitating factors suggested the presence of a hypercoagulable state.

Aetiological work for stroke showed positive ANA and anti ds DNA **(Table 1).** Antiphospholipid antibody titre was also raised. Serum Homocysteine levels and 2 D echocardiogram were within normal limits.

Table 1. Investigations results in the case patient

Anti ds DNA	Positive
Anti nuclear antibody	Positive
APTT	44s (control 32 s)
Platelet count	1 lakhs/cumm
ESR	70 mm/1 st hr
Ig G aCL	42.6 g/ml (<23 g/ml)
Ig M aCL	14 g/ml(<11 g/ml)
2 D echocardiogram	Normal
Serum Homocysteine	7.8 (N <9 mmol/l)

DIAGNOSIS AND TREATMENT

A final diagnosis of Systemic Lupus erythematosis with secondary APLA syndrome was made based on the above serological tests. She was initiated on antiplatelets and anticoagulation. Patient had a remarkable improvement.

DISCUSSION

Anti phospholipid antibodies (APLA) are a part of heterogeneous group of circulating serum polyclonal Immunoglobulins (IgG, IgM, IgA or mixed) that bind negatively charged or neutral phospholipid component of cell membranes and cause increased tendency to venous or arterial thrombosis.[1] There has been a dramatic surge of interest in APLA and associated clinical disorders especially focal ischaemic cerebrovascular diseases.[2] They are probably present in up to 50% of the young persons with stroke and perhaps even in higher prevalence with recurrent ischaemic and diseases like systemic lupus

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erythematosus (SLE).[3] Due to unexplained aetiology in large number of young stroke patients and absence of conventional predisposing risk factors like hypertension, diabetes, atherosclerosis etc., the importance of APLA estimation may increase many fold.

APLA lead to a hypercoagulable state by several distinct mechanisms like endothelial anticoagulant dysfunction, abnormalities of prostacyclin, antithrombin III, placental anticoagulant protein, protein C and protein S, and complement activation, any of which could lead to thrombosis.[4] In addition to these factors, various studies have shown that b2-GP1 may be the key immunogen in the APLAS.[5]

To conclude, cases with recurrent miscarriages, deep vein thrombosis of any site, unexplained thrombocytopenia, venous or arterial ischaemic stroke etc should be investigated for antiphospholipid antibodies. This is a treatable condition, and can be prevented with long term anticoagulation. All young patients with unexplained stroke must be investigated for APLAS.

END NOTE

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Conflict of Interest: None declared

Editor's Remarks: This case is presented since such cases may be relevant while evaluating cases of recurrent stoke.

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